

SYSTEM ANALYSIS

MGMI 311

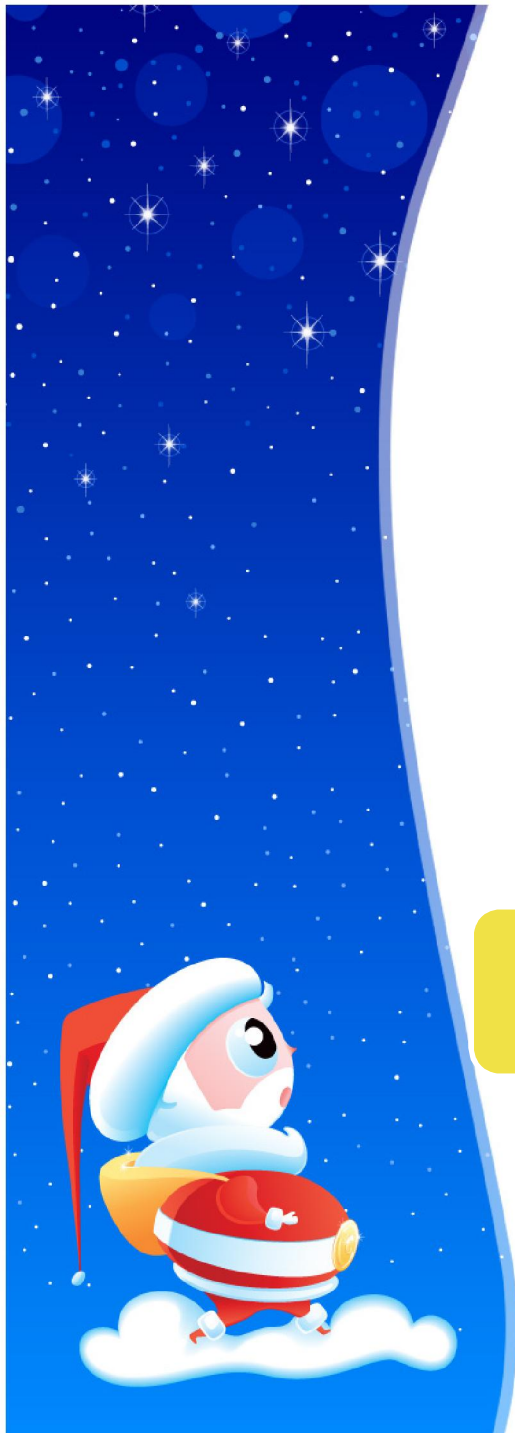
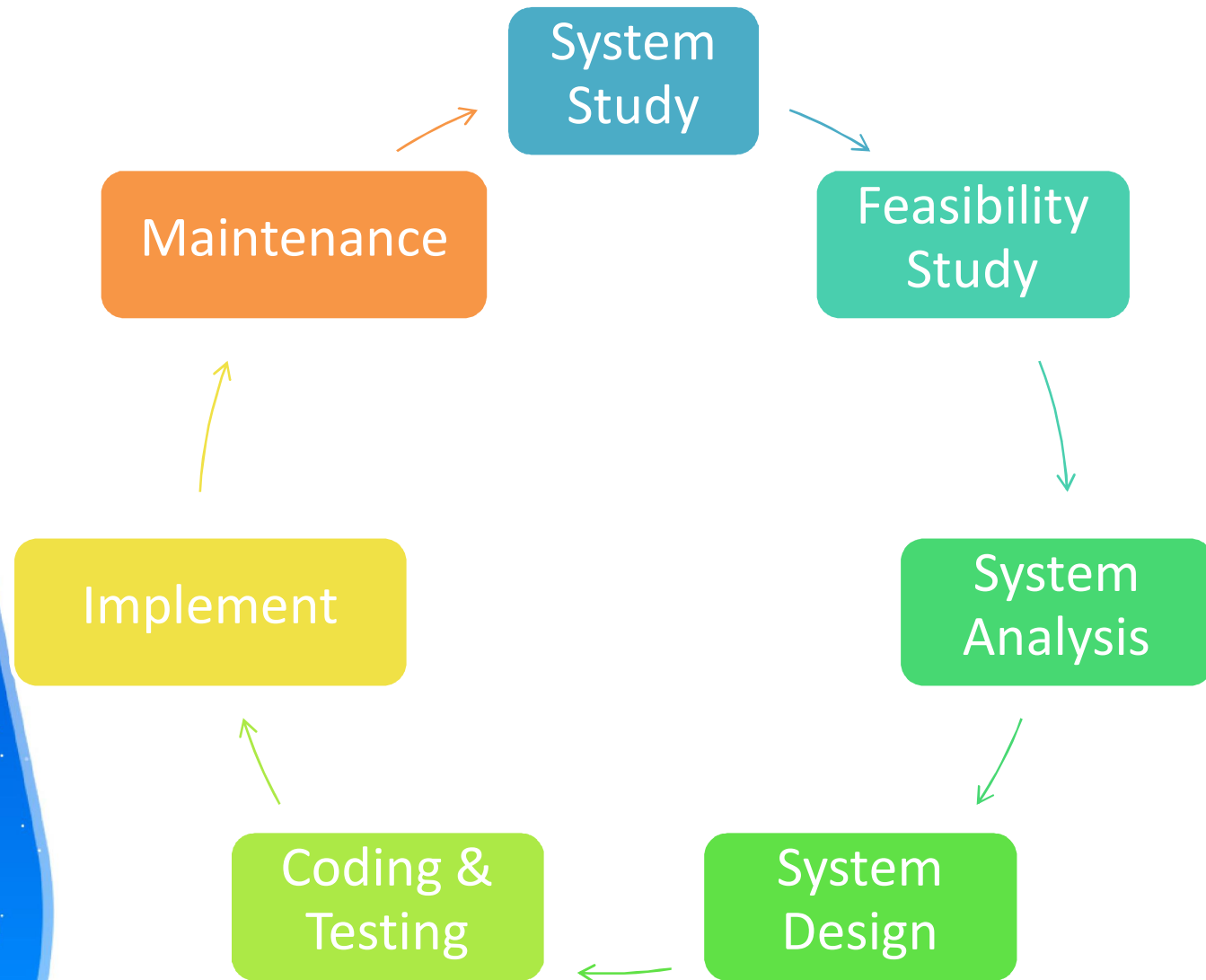


System

- A collection of components that work together to realize some objective



System Life Cycle



System Study

- Problem identification
 - Problem Definition
 - Objectives of the Study
 - Constraints
 - Expected benefits of the new system
(User requirements)
- Background Analysis
- Inference or Findings

Project
Proposal



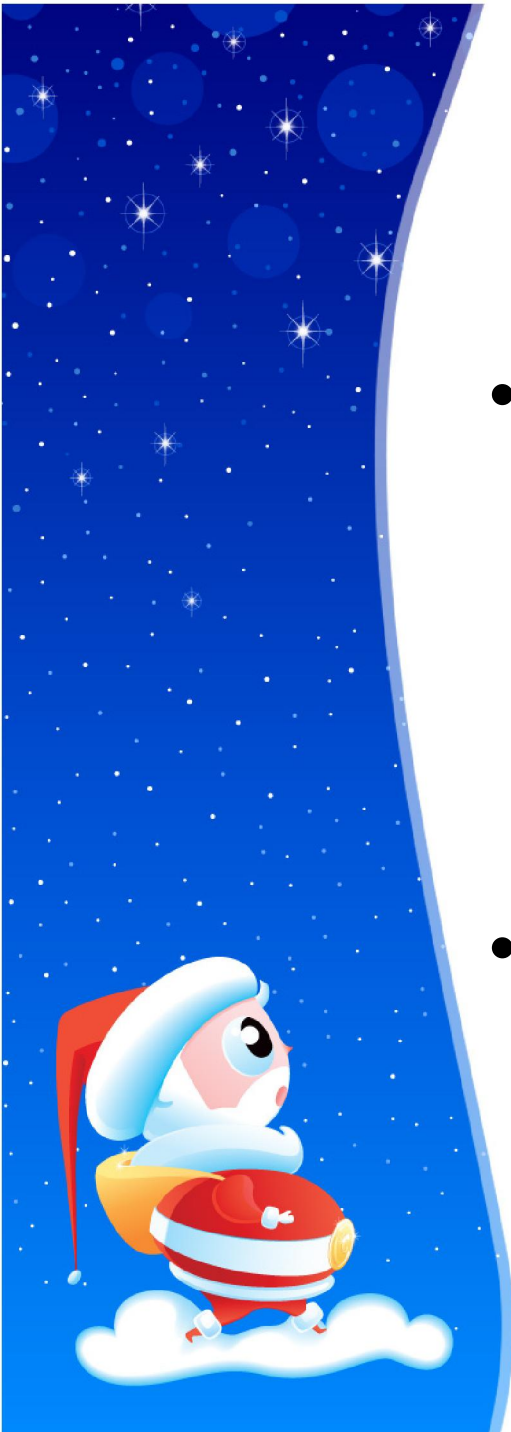
Feasibility Study

- ✓ Technical Feasibility
- ✓ Operational Feasibility
- ✓ Economic Feasibility
- ✓ Schedule Feasibility



System Analysis

- Detailed study of various operations performed by a system and their relationships within and outside the system
- All data and the findings must be documented in the form of detailed Data Flow Diagram (DFDs), data dictionary and logical data structures



System Analysis -cont

- What the new system can do based on the user requirement
- Functional hierarchy – functions in the new system and their relationship with each other
- List of attributes of the entities (data item kept in each record)



System Analysis -cont

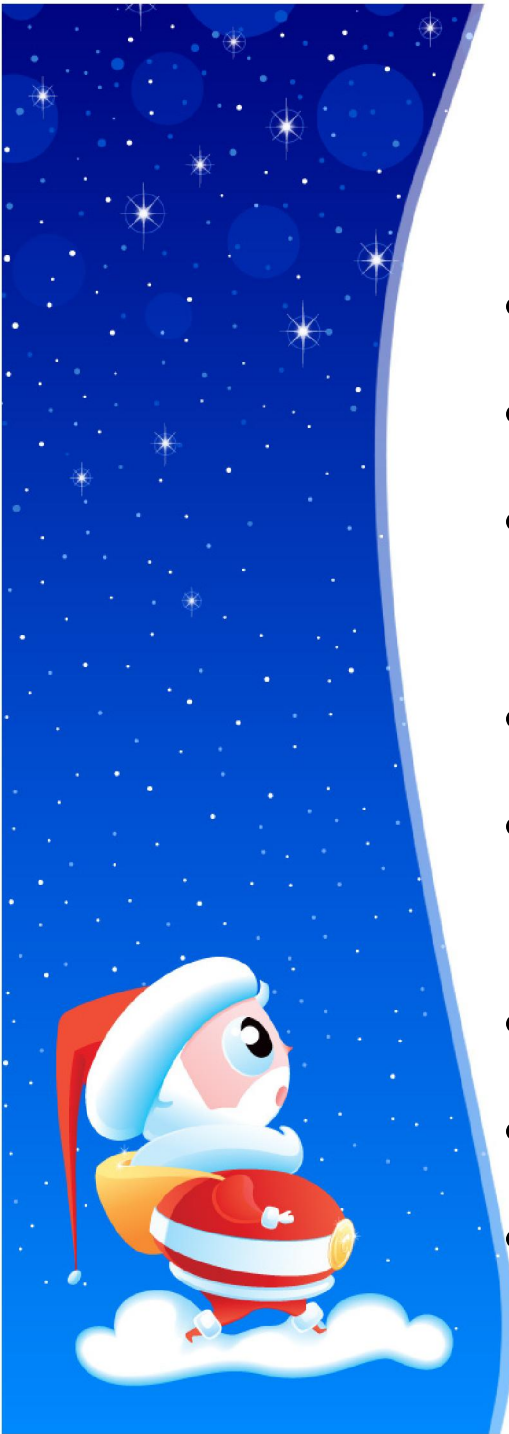
To find answers for each business process

- What is being done ?
- Who is doing it ?
- When is he doing it ?
- Why is it being done ?
- How can it be improved ?



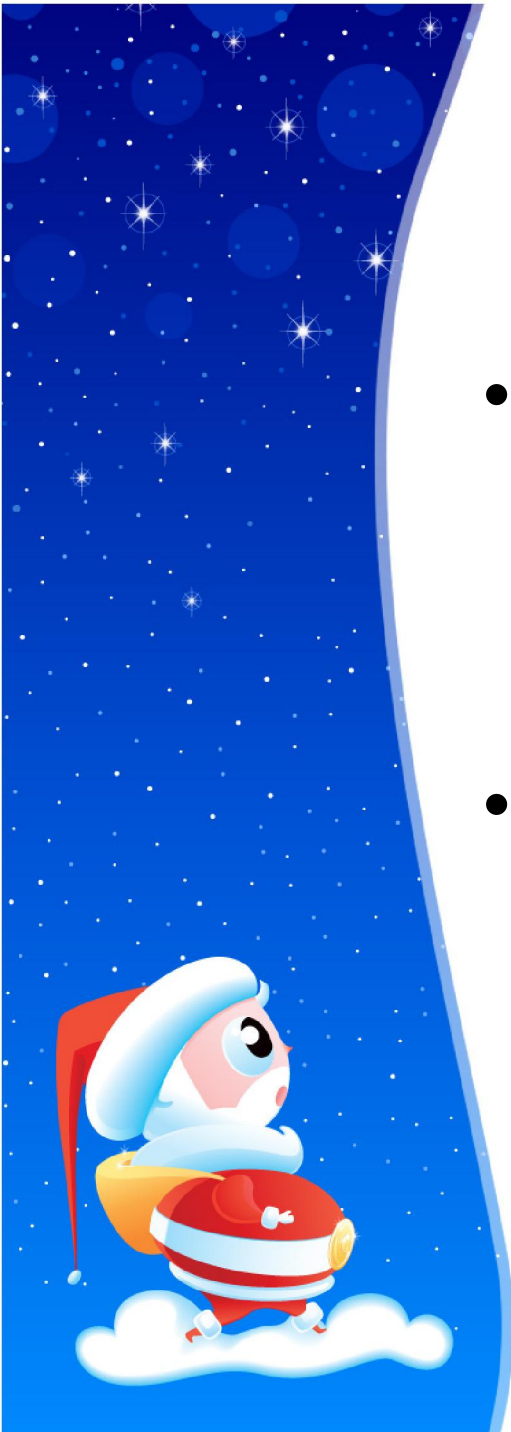
System Design

- Define the required system output
- Determine the data requirement
- Determine the medium and format of files and database
- Design processing methods
- Determine how data should be capture and input
- Design input forms
- Detailed manual procedure
- Documenting the Design



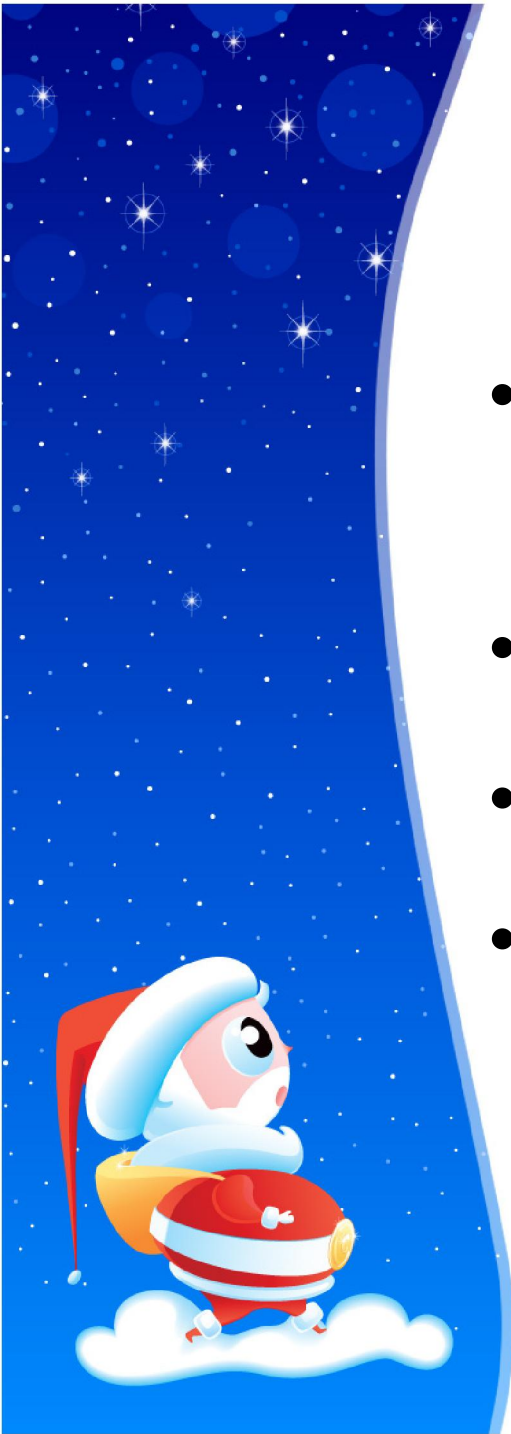
Coding & Testing

- Coding = Programming phase
 - Convert program specifications into computer instructions using programming language
- Testing
 - Program Test : test data & debug
 - System Test : actual data & fixing errors



Implementation

- Acquisition & Installation of Hardware and Software
- Conversion
- User Training
- Documentation



User Training

- How to execute the package
- How to enter the data
- How to process the data
- How to take out the reports



Changeover

- Direct Changeover
- Parallel Run
- Pilot Run



Maintenance

- Knowing the full capabilities of the system
- Knowing the required changes or the additional requirements
- Studying the performance



Assignment Week02

- Define Input data / Process / Output data for each business unit function
- Draw a data flow diagram for your business